## Assembly Bill No. 1755

## **CHAPTER 855**

An act to amend Section 2827 of the Public Utilities Code, and to add and repeal Section 73 of the Revenue and Taxation Code, relating to solar energy.

[Approved by Governor September 24, 1998. Filed with Secretary of State September 25, 1998.]

## LEGISLATIVE COUNSEL'S DIGEST

AB 1755, Keeley. Solar and wind turbine energy systems: net energy metering.

(1) Existing law requires every electric utility in the state, including a privately owned or publicly owned public utility, municipally owned utility, and electrical cooperative that offers residential service, whether or not the entity is subject to the jurisdiction of the Public Utilities Commission, to develop a standard contract or tariff providing for net energy metering to be available to eligible customer-generators, in accordance with specified restrictions. Existing law defines "net energy metering" to mean a single, nondemand, non-time-differentiated meter measure the difference between the electricity supplied by a utility and the electricity generated by an eligible customer-generator. Existing law defines "eligible customer-generator" to mean a residential customer of an electric utility, including specified entities, who owns and operates a solar electrical generating facility with a capacity of not more than 10 kilowatts that is located on the customer's premises, operates in parallel with the transmission and distribution facilities, and is intended primarily to offset part or all of the customer's own electrical requirements.

This bill would require every electric service provider, as defined, to develop a standard contract and make the contract available to customer-generators, as prescribed. The bill would modify the definitions of net energy metering and eligible customer-generator, and would define ratemaking authority, as specified. The bill would require net energy metering to be accomplished, as specified.

(2) Former statutory property tax law, enacted pursuant to the authority granted to the Legislature pursuant to paragraph (1) of subdivision (c) of Section 2 of Article XIII A of the California Constitution, generally provided that the term "newly constructed" as used in the California Constitution does not include the construction or addition of any active solar energy system, as defined. The former statutory provisions specified related matters pertaining to active solar energy systems subject to the exclusion. The former

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provisions applied only to the lien dates for fiscal years 1981–82 to 1993–94, inclusive, and were repealed as of January 1, 1995.

This bill would, until January 1, 2006, reinstate those exclusion provisions for an active solar energy system, as defined, to apply to property tax lien dates for the 1999–2000 to 2004–05 fiscal years, inclusive. The bill would, as part of a statement of legislative intent, define the term "parts" with respect to the definition of the term "active solar energy system". By requiring local taxing authorities to perform duties with regard to the reenactment of the active solar energy system exclusion, the bill would impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Section 2827 of the Public Utilities Code is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering for eligible customer-generators is one way to encourage private investment in renewable energy resources, stimulate in-state economic growth, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

- (b) As used in this section, the following definitions apply:
- (1) "Electric service provider" means an electric corporation, as defined in Section 218, a local publicly owned electric utility, as defined in Section 9604, or an electrical cooperative, as defined in Section 2776. "Electric service provider" also means an entity that offers electrical service to residential and small commercial customers, as defined in Section 394, if that entity offers net energy metering. Any entity that offers net energy metering to residential and small commercial customers shall comply with this section.
- (2) "Eligible customer-generator" means a residential customer, or a small commercial customer as defined in subdivision (h) of Section 331, of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than 10 kilowatts that is located on the customer's premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electrical requirements.
- (3) "Net energy metering" means measuring the difference between the electricity supplied through the electric grid and the

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electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (e). Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each installed may be with the consent customer-generator, at the expense of the electric service provider, and the additional metering shall be used only to provide the necessary accurately bill or information to customer-generator pursuant to the provisions of subdivision (e), or to collect solar or wind electric generating system performance information for research purposes. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. If an additional meter or meters are installed, the net energy metering calculation shall yield a result identical to that of a single meter. An eligible customer-generator who already owns an existing solar or wind turbine electrical generating facility, or a hybrid system of both, is eligible to receive net energy metering service in accordance with this section.

- (4) "Ratemaking authority" means, for an electrical corporation as defined in Section 218, or an electrical cooperative as defined in Section 2776, the commission, and for a local publicly owned electric utility as defined in Section 9604, the local elected body responsible for regulating the rates of the utility.
- (c) (1) Every electric service provider shall develop a standard contract or tariff providing for net energy metering, and shall make this contract available to eligible customer-generators, upon request, on a first-come, first-served basis until the time that the total rated generating capacity used by eligible customer-generators equals one-tenth of 1 percent of the electric service provider's aggregate customer peak demand.
- (2) On an annual basis, beginning in 1999, every electric service provider shall make available to the ratemaking authority information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider's service area. For those electric service providers who are operating pursuant to Section 394, they shall make available to the ratemaking authority the information required by this paragraph for each eligible customer-generator that is their customer for each service area of an electric corporation, local publicly owned electric utility, or electrical cooperative, in which the customer has net energy metering. The ratemaking authority shall develop a process for making the information required by this paragraph available to energy service providers, and for using that information to

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determine when, pursuant to paragraph (3), a service provider is not obligated to provide net energy metering to additional customer-generators in its service area.

- (3) Notwithstanding paragraph (1), an electric service provider is not obligated to provide net energy metering to additional customer-generators in its service area when the combined total peak demand of all customer-generators served by all the electric service providers in that service area furnishing net energy metering to eligible customer-generators equals one-tenth of 1 percent of the aggregate customer peak demand of those electric service providers.
- (d) Each net energy metering contract or tariff shall be identical, with respect to rate structure, all retail rate components, and any monthly charges, to the contract or tariff to which the same customer would be assigned if such customer was not an eligible customer-generator. The charges for all retail rate components for eligible customer-generators shall be based exclusively on the customer-generator's kilowatthour net consumption 12-month period, without regard to the customer-generator's choice of electric service provider, in accordance with subdivision (e). Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or other charge that would increase an eligible customer-generator's costs beyond those of other customers in the rate class to which the eligible customer-generator would otherwise be assigned are contrary to the intent of this legislation, and shall not form a part of net energy metering contracts or tariffs.
- (e) The net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a 12-month period. The following rules shall apply to the annualized net metering calculation:
- (1) The eligible customer-generator shall, at the end of each 12-month period following the date of final interconnection of the eligible customer-generator's system with an electric service provider, and at each anniversary date thereafter, be billed for electricity used during that period. The electric service provider shall determine if the eligible customer-generator was a net consumer or a net producer of electricity during that period.
- (2) At the end of each 12-month period, where the electricity supplied during the period by the electric service provider exceeds the electricity generated by the eligible customer-generator during that same period, the eligible customer-generator is a net electricity consumer and the electric service provider shall be owed compensation for the eligible customer-generator's net kilowatthour consumption over that same period. The compensation owed for the eligible customer-generator's net 12-month kilowatthour

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consumption shall be calculated based on the average retail price per kilowatthour for the eligible customer-generator's rate class over that same period.

- (3) At the end of each 12-month period, where the electricity generated by the eligible customer-generator during the 12-month period exceeds the electricity supplied by the electric service provider during that same period, the eligible customer-generator is a net electricity producer and the electric service provider shall retain any excess kilowatthours generated during the prior 12-month period. The eligible customer-generator shall not be owed any compensation for those excess kilowatthours unless the electric service provider enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours.
- (4) The electric service provider shall provide every eligible customer-generator with net electricity consumption information on each regular bill. That information shall include the current monetary balance owed the electric service provider for net electricity consumed since the last 12-month period ended. Notwithstanding subdivision (e), an electric service provider shall, upon the request of an eligible customer-generator, permit that customer to pay monthly for net energy consumed.
- (5) If an eligible customer-generator terminates the customer relationship with the electric service provider, the electric service provider shall reconcile the eligible customer-generator's consumption and production of electricity during any part of a 12-month period following the last reconciliation, according to the requirements set forth in this subdivision, except that those requirements shall apply only to the months since the most recent 12-month bill.
- (f) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public safety and Utilities Commission regarding reliability. wind customer-generator whose solar or turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.
- SEC. 2. Section 73 is added to the Revenue and Taxation Code, to read:
- 73. (a) Pursuant to the authority granted to the Legislature pursuant to paragraph (1) of subdivision (c) of Section 2 of Article XIII A of the California Constitution, the term "newly constructed," as used in subdivision (a) of Section 2 of Article XIII A of the

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California Constitution, does not include the construction or addition of any active solar energy system, as defined in subdivision (b).

- (b) (1) "Active solar energy system" means a system that uses solar devices, which are thermally isolated from living space or any other area where the energy is used, to provide for the collection, storage, or distribution of solar energy.
- (2) "Active solar energy system" does not include solar swimming pool heaters or hot tub heaters.
- (3) Active solar energy systems may be used for any of the following:
  - (A) Domestic, recreational, therapeutic, or service water heating.
  - (B) Space conditioning.
  - (C) Production of electricity.
  - (D) Process heat.
  - (E) Solar mechanical energy.
- (c) (1) (A) The Legislature finds and declares that the definition of spare parts in this paragraph is declarative of the intent of the Legislature, in prior statutory enactments of this section that excluded active solar energy systems from the term "newly constructed," as used in the California Constitution, thereby creating a tax appraisal exclusion.
- (B) An active solar energy system that uses solar energy in the electricity includes production of storage devices, conditioning equipment, transfer equipment, and parts related to the functioning of those items. In general, the use of solar energy in the production of electricity involves the transformation of sunlight into electricity through the use of devices such as solar cells or other collectors. However, an active solar energy system used in the production of electricity includes only equipment used up to, but not including, the stage of the transmission or use of the electricity. For the purpose of this paragraph, the term "parts" includes spare parts that are owned by the owner of, or the maintenance contractor for, an active solar energy system that uses solar energy in the production of electricity and which spare parts were specifically purchased, designed, or fabricated by or for that owner or maintenance contractor for installation in an active solar energy system that uses solar energy in the production of electricity, thereby including those parts in the tax appraisal exclusion created by this section.
- (2) An active solar energy system that uses solar energy in the production of electricity also includes pipes and ducts that are used exclusively to carry energy derived from solar energy. Pipes and ducts that are used to carry both energy derived from solar energy and from energy derived from other sources are active solar energy system property only to the extent of 75 percent of their full cash value.
- (3) An active solar energy system that uses solar energy in the production of electricity does not include auxiliary equipment, such

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as furnaces and hot water heaters, that use a source of power other than solar energy to provide usable energy. An active solar energy system that uses solar energy in the production of electricity does include equipment, such as ducts and hot water tanks, that is utilized by both auxiliary equipment and solar energy equipment, that is, dual use equipment. That equipment is active solar energy system property only to the extent of 75 percent of its full cash value.

- (d) This section shall apply to property tax lien dates for the 1999–2000 to 2004–05 fiscal years, inclusive. For purposes of supplemental assessment, this section shall apply only to qualifying construction or additions completed on or after January 1, 1999.
- (e) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute that is enacted before January 1, 2006, deletes or extends that date.
- SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the duties imposed on a local agency or school district by this act were expressly included in a ballot measure approved by the voters in a statewide election, within the meaning of Section 17556 of the Government Code.

Notwithstanding Section 17580 of the Government Code, unless otherwise specified, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.